

7 March 2024

Gwydir Regulated River Water Source

Water allocation update

There is no allocation increase to General security (GS) licences in the Gwydir regulated river water source at this time. Cumulative GS allocation for 2023/24 remains at 11% of entitlement.

It is estimated that water currently available to GS water users totals 457.3 gegalitres (GL) or an average 90% of entitlement. The Environmental Water Allowance (EWA) account balance is 89.6 GL, which is 199%. Environmental Water Allowance (EWA) (as defined in Clause 64 of the Water Sharing Plan for the Gwydir Regulated River Water Source 2016, current version for 2022) is formerly known as the Environmental Contingency Allowance (ECA).

Depletion scenarios for Copeton Dam for the assessment horizon are provided toward the end of this statement. This resource assessment is based on information to 29 February 2024. Any changes in resources from this date will be captured in the next routine statement in April 2024.

Current allocation

7 March 2024	Allocation Increment	Average Account Balance
General security	0%	90% (457.3 GL)
EWA	0%	199% (89.6 GL)

Storage levels (as of 7 March 2024)

- Copeton Dam is about 63% full – holding 850 gegalitres (GL).

Key information

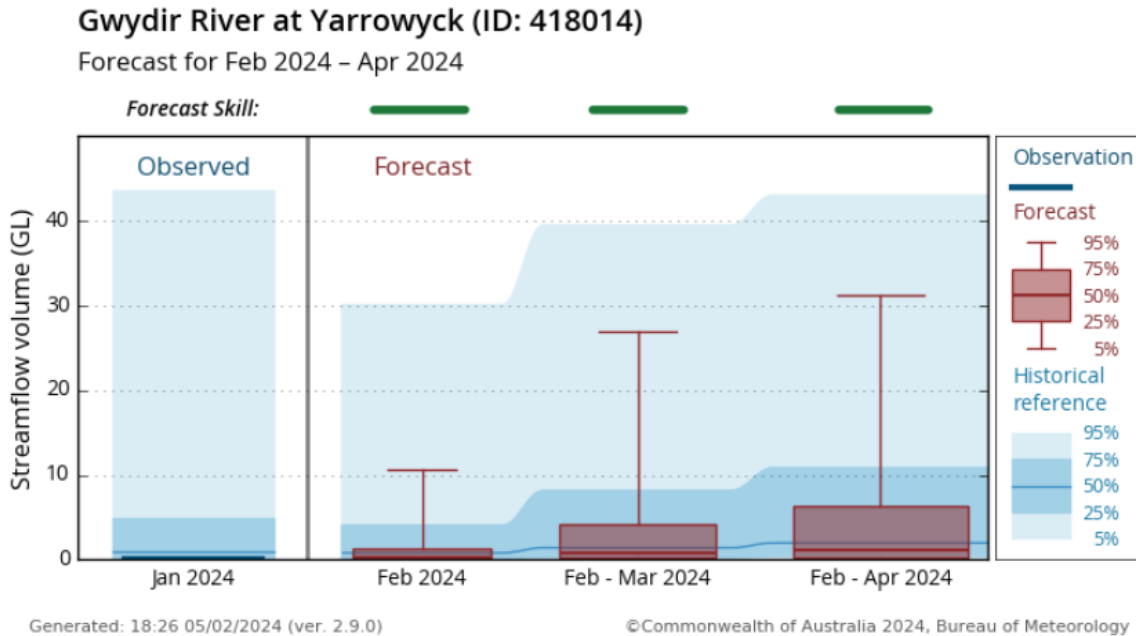
- Inflow to Copeton Dam in February was 3.5 GL and downstream tributary inflows added a further 3.3 GL to the system.
- Total essential supply demand was about 2.7 GL, and general security usage was approximately 33.9 GL. EWA ordered for the month was about 0.4 GL.
- The estimated general security account balance is currently 457.3 GL, of which 147.6 GL is Held Environmental Water (HEW) and 309.6 GL is for others, mostly for irrigation.

Climate and Streamflow Outlooks

The latest Bureau of Meteorology (BoM) seasonal outlook for March to May 2024 indicates rainfall in the Gwydir valley is likely to be below median. Daytime and overnight temperatures are expected to be hotter than median over this period.

For further details: www.bom.gov.au/climate/outlooks/#/overview/summary

The Bureau of Meteorology issues a seasonal flow forecast for the Gwydir River at Yarrowyck, upstream of Copeton Dam (see the figure below). This may provide an indication of potential inflows into the dam in the coming months. All forecast quantiles of total flow volumes from February to April 2024 are lower than the historical flows indicating a likely wetter outlook for inflows over this period. The graph for February to April 2024 is shown below, and updates can be found at: <http://www.bom.gov.au/water/ssf/#id=418014>



Resource Assessment Data Sheet

Resource distribution (as of 29 February 2024)	Volume (GL)
Copeton Dam active volume	856.2
<i>less</i>	
Storage Evaporation Losses ⁽¹⁾	70.8
Essential Supplies ⁽²⁾	80.7
Environmental Water Allowance (EWA)	89.6
Delivery Loss General Security ⁽³⁾	137.2
Delivery Loss EWA ⁽³⁾	26.9
General Security Held Environmental Water Account Balance ⁽⁴⁾	147.6
General Security Irrigator Account Balance	309.6
<i>Equals</i>	
Deficit ⁽⁵⁾	(6.2)

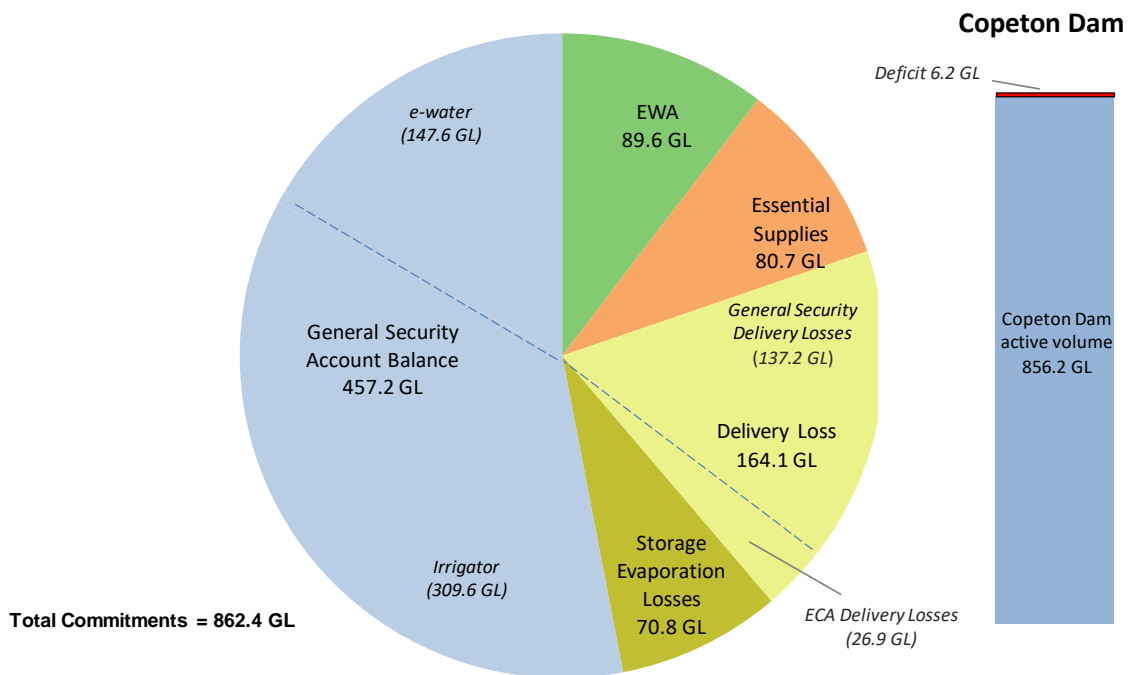
Notes:

- ⁽¹⁾ Storage evaporation loss is based on projected storage depletion over the next 24 month and experiencing high evaporation of February 1918 to January 1920.
- ⁽²⁾ This reserve of essential supplies reflects water required under the water sharing plan to provide for local water utility, stock and domestic, high security and riverine environments for the next 24 months. It includes stock and domestic replenishments, delivery loss allowance, and end-of-system flow requirements. This is offset by the minimum inflow into Copeton recorded over

February 1918 to January 1920. The full reserve is 82.9 GL. Current balance is 80.7 and will be topped up first from the next inflows. This reserve is for essential supplies for next 24 months.

- (3) This volume reflects the water needed to deliver general security and EWA water. Traditionally, a 30% delivery loss has been budgeted for this river system. See the table below for the actual volume remaining in the budget, which may be lower.
- (4) General security held environmental water (HEW) account balance is estimated to be 147.6 GL, and High Security HEW account balance is estimated to be 5.76 GL. These entitlements are held and/or managed either singly or jointly by various environmental holder groups, including the NSW environment water holder and the Commonwealth Environmental Water Holder (CEWH).
- (5) Surplus or deficit: The general security and EWA delivery loss budget has a small deficit (6.2 GL), which is being closely monitored.

Resource Distribution as at 29 February 2024 Gwydir Regulated River Water Source



Resource assessment as at 29 February 2024

Volumes in GL	Budget	Current	Additional	Balance
Storage Evaporation Loss	70.8	73.4	-2.6	70.8
Essential Supplies for next 24 months	82.9	78.8	1.8	80.7
Delivery Loss EWA+GS (256 GL max)	164.1	157.8	0.0	157.8
Delivery Loss GS (229.0 GL max)	137.2	131.0	0.0	131.0
Delivery Loss EWA (27 GL max)	26.9	26.8	0.0	26.8
EWA (90 GL max)		89.6	0.0	89.6

General Security (764.5 GL max)	457.3	0.0	457.3
Additional Resource for Sharing	-0.7	0.7	0.0
Total	856.2	0.0	856.2

General Security	Value	Unit
Incremental Increase CREDITED	0.0	GL
Available Water Determination	0.0	ML per unit share

Allocations in 2023/24

Date	License Category	Increment	Total 2023/24	Account Balance
1-Jul	LWU, Domestic & Stock	100%	100%*	100%*
1-Jul	High Security	1.00 ML/unit share	1.00 ML/share*	100%*
1-Jul	Supplementary	1.00 ML/unit share	1.00 ML/unit share*	100%*
1-Jul	Floodplain harvesting	1.00 ML/unit share	1.00 ML/unit share*	100%*
7-Jul	General Security	0.00 ML/unit share	0.00 ML/unit share	142.5%
7-Jul	EWA	0%	0%	90GL*
7-Aug	General Security	0.03 ML/unit share	0.03 ML/unit share	143%
7-Aug	EWA	3%	3%	90GL*
7-Dec	General Security	0.01 ML/unit share	0.04 ML/unit share	119%
7-Dec	EWA	1%	4%	90GL*
8-Jan	General Security	0.04 ML/unit share	0.08 ML/unit share	112%
8-Jan	EWA	4%	8%	90GL*
7-Feb	General Security	0.03 ML/unit share	0.11 ML/unit share	96%
7-Feb	EWA	3%	11%	90GL*

* Maximum allowable.

Storage volume prediction

Storage outlook for the assessment horizon is provided below. It shows that with current commitments and an assumed repeat of historical minimum inflows together with forecast demands, the volume in Copeton Dam will reduce to near minimum by the end of March 2025 and then is expected to recover.

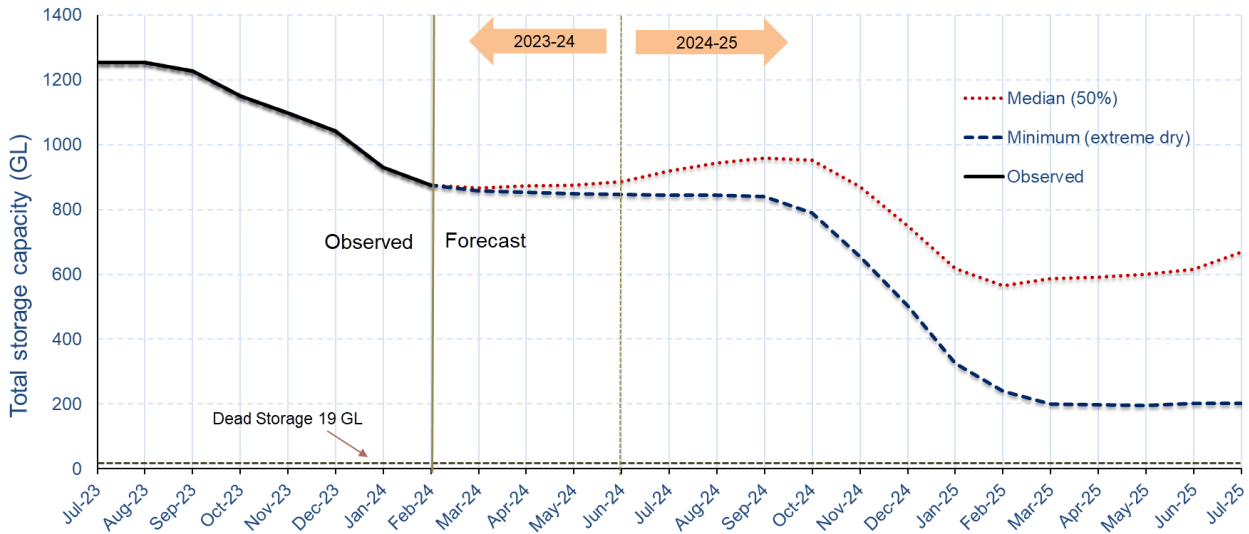


Figure: Simulated depletion of Copeton Dam storage volume

Next announcement

The next Gwydir water allocation statement will be published on **Monday 8 April 2024**. It will update current conditions and any improvements in water availability.

Information on available water determinations and water sharing plans is available on the department’s website: <https://water.dpie.nsw.gov.au/>

Water Allocation Guide

The NSW Department of Climate Change, Energy, the Environment and Water produced a series of guides to describe the water allocation methods for most NSW regulated river systems. The guide for the Gwydir regulated system is available at the following link: <https://water.dpie.nsw.gov.au/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process>

Subscribe [here](#) to receive the Department of Climate Change, Energy, the Environment and Water’s monthly email update on water planning, management and reform in New South Wales.

You can also follow the Department on X: @NSWDPIE_Water

Feedback on this work or any aspect of the Department’s service can be provided using the widget at <https://www.dpie.nsw.gov.au/contact>